

Titles of Most Frequently Occurring Classifications of Patents Returned  
From A Search of 09729562 on March 12, 2002

17 375/222 (7 OR, 10 XR)

Class 375 : PULSE OR DIGITAL COMMUNICATIONS

375/219 TRANSCEIVERS

375/222 .Modems (data sets)

9 379/30 (1 OR, 8 XR)

Class 379 : TELEPHONIC COMMUNICATIONS

379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
ELECTRICAL CONDITION MEASUREMENT

379/27.01 .Testing of subscriber loop or terminal

379/30 ..Loop impedance (e.g., resistance,  
capacitance)

8 324/539 (0 OR, 8 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING

324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF  
ELECTRIC COMPONENTS

324/537 .Of individual circuit component or element

324/539 ..Multiconductor cable

7 379/22.02 (2 OR, 5 XR)

Class 379 : TELEPHONIC COMMUNICATIONS

379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
ELECTRICAL CONDITION MEASUREMENT

379/22 .Of trunk or long line

379/22.02 ..By analysis of injected tone signal

7 379/22.03 (3 OR, 4 XR)

Class 379 : TELEPHONIC COMMUNICATIONS

379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
ELECTRICAL CONDITION MEASUREMENT

379/22 .Of trunk or long line

379/22.03 ..Fault detection or fault location on  
telephone link (e.g., continuity, leakage)

6 324/628 (6 OR, 0 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING

324/600 IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES  
REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE

RELATIONSHIPS

- 324/612 .Parameter related to the reproduction or fidelity of a signal affected by a circuit under test
- 324/627 ..Shielding effectiveness (SE)
- 324/628 ...Circuit interference (e.g., crosstalk) measurement

6 379/29.01 (1 OR, 5 XR)

Class 379 : TELEPHONIC COMMUNICATIONS

379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR ELECTRICAL CONDITION MEASUREMENT

379/27.01 .Testing of subscriber loop or terminal

379/29.01 ..Terminal arrangement to enable remote testing (e.g., testing interface)

6 725/106 (1 OR, 5 XR)

Class 725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS

725/105 VIDEO DISTRIBUTION SYSTEM WITH UPSTREAM COMMUNICATION

725/106 .Telephony via television distribution network

5 324/533 (2 OR, 3 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING

324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF ELECTRIC COMPONENTS

324/512 .For fault location

324/527 ..By applying a test signal

324/532 ...Using time measuring

324/533 ....Of reflected test signal

5 370/352 (1 OR, 4 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/351 PATHFINDING OR ROUTING

370/352 .Combined circuit switching and packet switching

5 370/463 (2 OR, 3 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/431 CHANNEL ASSIGNMENT TECHNIQUES

370/463 .Details of circuit or interface for connecting user to the network

- 5 375/260 (0 OR, 5 XR)  
Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
375/259 SYSTEMS USING ALTERNATING OR PULSATING CURRENT  
  
375/260 .Plural channels for transmission of a single  
pulse train
- 5 379/56.2 (5 OR, 0 XR)  
Class 379 : TELEPHONIC COMMUNICATIONS  
379/56.1 HAVING LIGHT WAVE OR ULTRASONIC LINK FOR SPEECH  
OR PAGING SIGNAL  
379/56.2 .Including fiber optic link within telephone  
network
- 5 725/131 (1 OR, 4 XR)  
Class 725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS  
725/105 VIDEO DISTRIBUTION SYSTEM WITH UPSTREAM  
COMMUNICATION  
725/131 .Receiver (e.g., set-top box)
- 4 324/527 (0 OR, 4 XR)  
Class 324 : ELECTRICITY: MEASURING AND TESTING  
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF  
ELECTRIC COMPONENTS  
324/512 .For fault location  
324/527 ..By applying a test signal
- 4 324/66 (2 OR, 2 XR)  
Class 324 : ELECTRICITY: MEASURING AND TESTING  
324/66 CONDUCTOR IDENTIFICATION OR LOCATION (E.G.,  
PHASE IDENTIFICATION)
- 4 370/465 (1 OR, 3 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/464 COMMUNICATION TECHNIQUES FOR INFORMATION  
CARRIED IN PLURAL CHANNELS  
370/465 .Adaptive
- 4 370/480 (1 OR, 3 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/473 ..Transmission of a single message having  
multiple packets  
370/480 .Combining or distributing information via

frequency channels

4 370/484 (0 OR, 4 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/473 ..Transmission of a single message having multiple packets

370/480 ..Combining or distributing information via frequency channels

370/484 ..Digital analysis or synthesis of a group

4 370/494 (3 OR, 1 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/473 ..Transmission of a single message having multiple packets

370/480 ..Combining or distributing information via frequency channels

370/493 ..Combined voice and data transmission

370/494 ...Data over voice

4 370/524 (2 OR, 2 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/473 ..Transmission of a single message having multiple packets

370/498 ..Combining or distributing information via time channels

370/522 ..Signaling (ancillary to main information)

370/524 ...Using a dedicated signaling channel (i.e., D-channel)

4 370/535 (0 OR, 4 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/473 ..Transmission of a single message having multiple packets

370/498 ..Combining or distributing information via time channels

370/535 ..Multiplexing combined with demultiplexing

4 375/219 (1 OR, 3 XR)

Class 375 : PULSE OR DIGITAL COMMUNICATIONS

375/219 TRANSCEIVERS

4 375/220 (3 OR, 1 XR)

Class 375 : PULSE OR DIGITAL COMMUNICATIONS

375/219            TRANSCEIVERS  
375/220            .Transmission interface between two stations or  
                 terminals

4 375/224        (3 OR, 1 XR)  
Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
375/224           TESTING

4 375/229        (3 OR, 1 XR)  
Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
375/229           EQUALIZERS

4 375/231        (2 OR, 2 XR)  
Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
375/229           EQUALIZERS  
375/230           .Automatic  
375/231           ..Training period or initial set up

4 379/27.01      (1 OR, 3 XR)  
Class 379 : TELEPHONIC COMMUNICATIONS  
379/1.01          DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
                 ELECTRICAL CONDITION MEASUREMENT  
379/27.01        .Testing of subscriber loop or terminal

4 379/27.03      (1 OR, 3 XR)  
Class 379 : TELEPHONIC COMMUNICATIONS  
379/1.01          DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
                 ELECTRICAL CONDITION MEASUREMENT  
379/27.01        .Testing of subscriber loop or terminal  
379/27.03        ..By analysis of testing signal

4 438/687        (1 OR, 3 XR)  
Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS  
  
438/584           COATING WITH ELECTRICALLY OR THERMALLY  
                 CONDUCTIVE MATERIAL  
438/597           .To form ohmic contact to semiconductive  
                 material  
438/687           ..Copper or copper alloy conductor

4 725/129        (0 OR, 4 XR)  
Class 725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS  
725/105           VIDEO DISTRIBUTION SYSTEM WITH UPSTREAM

## COMMUNICATION

725/118 .Transmission network  
 725/129 ..Hybrid fiber-coax network

## 3 174/36 (0 OR, 3 XR)

Class 174 : ELECTRICITY: CONDUCTORS AND INSULATORS  
 174/32 ANTI-INDUCTIVE STRUCTURES  
 174/35R .Shielded or screened  
 174/36 ..Conductor only

## 3 324/525 (1 OR, 2 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING  
 324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF  
 ELECTRIC COMPONENTS  
 324/512 .For fault location  
 324/525 ..By resistance or impedance measuring

## 3 324/532 (1 OR, 2 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING  
 324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF  
 ELECTRIC COMPONENTS  
 324/512 .For fault location  
 324/527 ..By applying a test signal  
 324/532 ...Using time measuring

## 3 359/135 (0 OR, 3 XR)

Class 359 : OPTICS: SYSTEMS  
 359/109 OPTICAL COMMUNICATION  
 359/115 .Multiplex  
 359/135 ..Time division

## 3 370/249 (3 OR, 0 XR)

Class 370 : MULTIPLEX COMMUNICATIONS  
 370/241 DIAGNOSTIC TESTING (OTHER THAN SYNCHRONIZATION)  
  
 370/249 .Loopback

## 3 370/252 (2 OR, 1 XR)

Class 370 : MULTIPLEX COMMUNICATIONS  
 370/241 DIAGNOSTIC TESTING (OTHER THAN SYNCHRONIZATION)  
  
 370/252 .Determination of communication parameters

- 3 370/395.51 (1 OR, 2 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/351 PATHFINDING OR ROUTING  
370/389 .Switching a message which includes an address  
header  
370/395.1 ..Message transmitted using fixed length  
packets (e.g., ATM cells)  
370/395.5 ...Multiprotocol network  
370/395.51 ....Utilizing a plurality of ATM networks
- 3 370/431 (0 OR, 3 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/431 CHANNEL ASSIGNMENT TECHNIQUES
- 3 370/468 (1 OR, 2 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/464 COMMUNICATION TECHNIQUES FOR INFORMATION  
CARRIED IN PLURAL CHANNELS  
370/465 .Adaptive  
370/468 ..Assignment of variable bandwidth or time  
period for transmission or reception
- 3 375/257 (2 OR, 1 XR)  
Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
375/257 CABLE SYSTEMS AND COMPONENTS
- 3 375/295 (2 OR, 1 XR)  
Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
375/295 TRANSMITTERS
- 3 379/21 (0 OR, 3 XR)  
Class 379 : TELEPHONIC COMMUNICATIONS  
379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
ELECTRICAL CONDITION MEASUREMENT  
379/21 .Using portable test set (e.g., handset type)
- 3 379/22 (2 OR, 1 XR)  
Class 379 : TELEPHONIC COMMUNICATIONS  
379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
ELECTRICAL CONDITION MEASUREMENT  
379/22 .Of trunk or long line

- 3 379/22.07 (0 OR, 3 XR)  
Class 379 : TELEPHONIC COMMUNICATIONS  
379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
ELECTRICAL CONDITION MEASUREMENT  
379/22 .Of trunk or long line  
379/22.03 ..Fault detection or fault location on  
telephone link (e.g., continuity, leakage)  
379/22.07 ...Telephone multiconducting wires (e.g., tip,  
ring and ground wires)
- 3 379/24 (0 OR, 3 XR)  
Class 379 : TELEPHONIC COMMUNICATIONS  
379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
ELECTRICAL CONDITION MEASUREMENT  
379/22 .Of trunk or long line  
379/24 ..Electrical parameter measurement (e.g.,  
attenuation)
- 3 379/29.05 (0 OR, 3 XR)  
Class 379 : TELEPHONIC COMMUNICATIONS  
379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
ELECTRICAL CONDITION MEASUREMENT  
379/27.01 .Testing of subscriber loop or terminal  
379/29.01 ..Terminal arrangement to enable remote testing  
(e.g., testing interface)  
379/29.05 ...Metallic loop testing
- 3 379/93.09 (0 OR, 3 XR)  
Class 379 : TELEPHONIC COMMUNICATIONS  
379/90.01 TELEPHONE LINE OR SYSTEM COMBINED WITH DIVERSE  
ELECTRICAL SYSTEM OR SIGNALLING (E.G., COMPOSITE)  
379/93.01 .Having transmission of a digital message  
signal over a telephone line  
379/93.09 ..Switching between different terminal types  
(e.g., voice/data switch)
- 3 439/101 (0 OR, 3 XR)  
Class 439 : ELECTRICAL CONNECTORS  
439/92 WITH CIRCUIT CONDUCTORS AND SAFETY GROUNDING  
PROVISION  
439/101 .Direct grounding of coupling part member  
passing into aperture



- 3 439/67 (1 OR, 2 XR)  
Class 439 : ELECTRICAL CONNECTORS  
439/55 PREFORMED PANEL CIRCUIT ARRANGEMENT, E.G., PCB,  
ICM, DIP, CHIP, WAFER, ETC.  
439/65 .With provision to conduct electricity from  
panel circuit to another panel circuit  
439/67 ..Flexible panel
- 3 439/92 (3 OR, 0 XR)  
Class 439 : ELECTRICAL CONNECTORS  
439/92 WITH CIRCUIT CONDUCTORS AND SAFETY GROUNDING  
PROVISION
- 3 725/116 (0 OR, 3 XR)  
Class 725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS  
725/105 VIDEO DISTRIBUTION SYSTEM WITH UPSTREAM  
COMMUNICATION  
725/114 .Server or headend  
725/116 ..Control process
- 3 725/119 (0 OR, 3 XR)  
Class 725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS  
725/105 VIDEO DISTRIBUTION SYSTEM WITH UPSTREAM  
COMMUNICATION  
725/118 .Transmission network  
725/119 ..Having significant intermediate network unit  
(e.g., hub, substation, etc.)
- 3 725/126 (0 OR, 3 XR)  
Class 725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS  
725/105 VIDEO DISTRIBUTION SYSTEM WITH UPSTREAM  
COMMUNICATION  
725/118 .Transmission network  
725/126 ..Detail of use of two-way spectrum
- 2 29/623 (1 OR, 1 XR)  
Class 029 : METAL WORKING  
29/592 METHOD OF MECHANICAL MANUFACTURE  
29/592.1 .Electrical device making  
29/623 ..Fuse making
- 2 29/830 (0 OR, 2 XR)  
Class 029 : METAL WORKING

- 29/592 METHOD OF MECHANICAL MANUFACTURE
- 29/592.1 .Electrical device making
- 29/825 ..Conductor or circuit manufacturing
- 29/829 ...On flat or curved insulated base, e.g.,  
printed circuit, etc.
- 29/830 ....Assembling bases
  
- 2 29/841 (0 OR, 2 XR)  
Class 029 : METAL WORKING
- 29/592 METHOD OF MECHANICAL MANUFACTURE
- 29/592.1 .Electrical device making
- 29/825 ..Conductor or circuit manufacturing
- 29/829 ...On flat or curved insulated base, e.g.,  
printed circuit, etc.
- 29/832 ....Assembling to base an electrical component,  
e.g., capacitor, etc.
- 29/841 .....With encapsulating, e.g., potting, etc.
  
- 2 29/890.046 (0 OR, 2 XR)  
Class 029 : METAL WORKING
- 29/592 METHOD OF MECHANICAL MANUFACTURE
- 29/890.03 .Heat exchanger or boiler making
- 29/890.045 ..Tube with heat transfer means
- 29/890.046 ...Finned tube
  
- 2 123/538 (2 OR, 0 XR)  
Class 123 : INTERNAL-COMBUSTION ENGINES
- 123/434 CHARGE FORMING DEVICE (E.G., POLLUTION CONTROL)
  
- 123/536 .Combustible mixture ionization, ozonation, or  
electrolysis
- 123/538 ..Fuel only
  
- 2 126/655 (1 OR, 1 XR)  
Class 126 : STOVES AND FURNACES
- 126/569 SOLAR HEAT COLLECTOR
- 126/634 .With means to convey fluent medium through  
collector
- 126/651 ..Conduit absorber structure
- 126/652 ...Surrounded by transparent enclosure
- 126/655 ....Plurality of conduit absorbers
  
- 2 137/377 (0 OR, 2 XR)

Class 137 : FLUID HANDLING  
137/343 WITH CASING, SUPPORT, PROTECTOR OR STATIC  
CONSTRUCTIONAL INSTALLATIONS  
137/377 .Guards and shields

2 137/382 (2 OR, 0 XR)  
Class 137 : FLUID HANDLING  
137/343 WITH CASING, SUPPORT, PROTECTOR OR STATIC  
CONSTRUCTIONAL INSTALLATIONS  
137/377 .Guards and shields  
137/382 ..Valve guards

2 164/436 (2 OR, 0 XR)  
Class 164 : METAL FOUNGING  
164/271 MEANS TO SHAPE METALLIC MATERIAL  
164/418 .Continuous or semicontinuous casting  
164/436 ..Adjustable mold size

2 164/491 (0 OR, 2 XR)  
Class 164 : METAL FOUNGING  
164/1 PROCESS  
164/47 .Shaping liquid metal against a forming surface  
  
164/459 ..Continuous or semicontinuous casting  
164/491 ...Adjusting mold size

2 174/117FF (2 OR, 0 XR)  
Class 174 : ELECTRICITY: CONDUCTORS AND INSULATORS  
174/68.1 CONDUITS, CABLES OR CONDUCTORS  
174/110R .Insulated  
174/113R ..Multiple conductor  
174/117R ...Assemblies of noncircular section  
174/117FF ....Conductor itself is flat

2 174/259 (0 OR, 2 XR)  
Class 174 : ELECTRICITY: CONDUCTORS AND INSULATORS  
174/68.1 CONDUITS, CABLES OR CONDUCTORS  
174/250 .Preformed panel circuit arrangement (e.g.,  
printed circuit)  
174/256 ..With particular material  
174/259 ...Adhesive/bonding

2 174/35C (2 OR, 0 XR)

Class 174 : ELECTRICITY: CONDUCTORS AND INSULATORS

174/32 ANTI-INDUCTIVE STRUCTURES

174/35R .Shielded or screened

174/35C ..Connectors and joints

2 174/52.1 (1 OR, 1 XR)

Class 174 : ELECTRICITY: CONDUCTORS AND INSULATORS

174/50 BOXES AND HOUSINGS

174/52.1 .With electric device or mounting means  
therefor

2 174/52.4 (1 OR, 1 XR)

Class 174 : ELECTRICITY: CONDUCTORS AND INSULATORS

174/50 BOXES AND HOUSINGS

174/52.1 .With electric device or mounting means  
therefor

174/52.3 ..Sealed

174/52.4 ...Flat housing for electronic device (e.g.,  
flat pack, dual-in-line package)

2 204/281 (1 OR, 1 XR)

Class 204 : CHEMISTRY: ELECTRICAL AND WAVE ENERGY

204/193 APPARATUS

204/194 .Electrolytic

204/279 ..Elements

204/280 ...Electrodes

204/281 ....Electroforming molds or strips plates

2 204/293 (0 OR, 2 XR)

Class 204 : CHEMISTRY: ELECTRICAL AND WAVE ENERGY

204/193 APPARATUS

204/194 .Electrolytic

204/279 ..Elements

204/280 ...Electrodes

204/291 ....Composition

204/292 .....Metallic

204/293 .....Alloys

2 210/138 (1 OR, 1 XR)

Class 210 : LIQUID PURIFICATION OR SEPARATION

210/138 WITH TIME CONTROL

2 210/169 (0 OR, 2 XR)

Class 210 : LIQUID PURIFICATION OR SEPARATION  
 210/153 STRUCTURAL INSTALLATION  
 210/167 .Closed circulating systems  
 210/169 ..Aquarium or swimming pool

2 210/192 (0 OR, 2 XR)

Class 210 : LIQUID PURIFICATION OR SEPARATION  
 210/192 WITH PRELIMINARY CHEMICAL MANUFACTURE

2 228/180.21 (0 OR, 2 XR)

Class 228 : METAL FUSION BONDING  
 228/101 PROCESS  
 228/178 .Plural joints  
 228/179.1 ..Of electrical device (e.g., semiconductor)  
 228/180.1 ...Simultaneous bonding of multiple joints  
 (e.g., dip soldering of printed circuit boards)  
 228/180.21 ....Component terminal to substrate surface  
 (i.e., nonpenetrating terminal)

2 257/751 (1 OR, 1 XR)

Class 257 : ACTIVE SOLID-STATE DEVICES  
 257/734 COMBINED WITH ELECTRICAL CONTACT OR LEAD  
 257/741 .Of specified material other than unalloyed  
 aluminum  
 257/750 ..Layered  
 257/751 ...At least one layer forms a diffusion barrier

2 313/506 (2 OR, 0 XR)

Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
 313/483 WITH LUMINESCENT SOLID OR LIQUID MATERIAL  
 313/498 .Solid-state type  
 313/506 ..Plural layers

2 313/512 (0 OR, 2 XR)

Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
 313/483 WITH LUMINESCENT SOLID OR LIQUID MATERIAL  
 313/498 .Solid-state type  
 313/512 ..With envelope or encapsulation

2 324/133 (0 OR, 2 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING  
 324/76.11 MEASURING, TESTING, OR SENSING ELECTRICITY, PER

SE

324/133 .Nonquantitative (e.g., hot-line indicator,  
polarity tester)

2 324/318 (1 OR, 1 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING

324/300 PARTICLE PRECESSION RESONANCE

324/318 .Spectrometer components

2 324/520 (1 OR, 1 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING

324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF  
ELECTRIC COMPONENTS

324/512 .For fault location

324/520 ..By frequency sensitive or responsive  
detection

2 324/522 (1 OR, 1 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING

324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF  
ELECTRIC COMPONENTS

324/512 .For fault location

324/522 ..By voltage or current measuring

2 324/534 (0 OR, 2 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING

324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF  
ELECTRIC COMPONENTS

324/512 .For fault location

324/534 ..By reflection technique

2 324/616 (1 OR, 1 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING

324/600 IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES  
REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE  
RELATIONSHIPS

324/612 .Parameter related to the reproduction or  
fidelity of a signal affected by a circuit under test

324/615 ..Transfer function type characteristics

324/616 ...Gain or attenuation

2 324/620 (0 OR, 2 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING

- 324/600 IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES  
REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE  
RELATIONSHIPS
- 324/612 .Parameter related to the reproduction or  
fidelity of a signal affected by a circuit under test
- 324/620 ..Distortion
- 2 333/246 (0 OR, 2 XR)  
Class 333 : WAVE TRANSMISSION LINES AND NETWORKS  
333/245 LONG LINE ELEMENTS AND COMPONENTS  
333/246 .Strip type
- 2 333/28R (0 OR, 2 XR)  
Class 333 : WAVE TRANSMISSION LINES AND NETWORKS  
333/24R COUPLING NETWORKS  
333/28R .Equalizers
- 2 333/81R (0 OR, 2 XR)  
Class 333 : WAVE TRANSMISSION LINES AND NETWORKS  
333/81R ATTENUATORS
- 2 335/216 (2 OR, 0 XR)  
Class 335 : ELECTRICITY: MAGNETICALLY OPERATED SWITCHES,  
MAGNETS, AND ELECTROMAGNETS  
335/209 MAGNETS AND ELECTROMAGNETS  
335/216 .Superconductive type
- 2 336/200 (2 OR, 0 XR)  
Class 336 : INDUCTOR DEVICES  
336/199 COIL OR COIL TURN SUPPORTS OR SPACERS  
336/200 .Printed circuit-type coil
- 2 336/232 (0 OR, 2 XR)  
Class 336 : INDUCTOR DEVICES  
336/225 COILS OF SPECIAL CONFIGURATION  
336/232 .Planar type
- 2 340/310.01 (0 OR, 2 XR)  
Class 340 : COMMUNICATIONS: ELECTRICAL  
340/286.01 SYSTEMS  
340/310.01 .Signal over power line
- 2 340/605 (0 OR, 2 XR)

Class 340 : COMMUNICATIONS: ELECTRICAL  
340/500           CONDITION RESPONSIVE INDICATING SYSTEM  
340/540           ..Specific condition  
340/603           ..Fluent material  
340/605           ...Leakage

2 343/895       (1 OR, 1 XR)

Class 343 : COMMUNICATIONS: RADIO WAVE ANTENNAS  
343/700R       ANTENNAS  
343/895       ..Spiral or helical type

2 351/117       (0 OR, 2 XR)

Class 351 : OPTICS: EYE EXAMINING, VISION TESTING AND  
CORRECTING  
351/41       SPECTACLES AND EYEGLASSES  
351/111       ..Temples  
351/117       ..With covered core or rod (e.g., reinforced)

2 351/129       (0 OR, 2 XR)

Class 351 : OPTICS: EYE EXAMINING, VISION TESTING AND  
CORRECTING  
351/41       SPECTACLES AND EYEGLASSES  
351/124       ..Bridges  
351/129       ..Reinforced

2 351/41       (2 OR, 0 XR)

Class 351 : OPTICS: EYE EXAMINING, VISION TESTING AND  
CORRECTING  
351/41       SPECTACLES AND EYEGLASSES

2 359/167       (1 OR, 1 XR)

Class 359 : OPTICS: SYSTEMS  
359/109       OPTICAL COMMUNICATION  
359/154       ..Transmitter and receiver system  
359/164       ..Plural stations  
359/167       ...Central or master station

2 359/171       (0 OR, 2 XR)

Class 359 : OPTICS: SYSTEMS  
359/109       OPTICAL COMMUNICATION  
359/154       ..Transmitter and receiver system  
359/171       ..Received signal supplies power distribution



to diverse devices

2 359/177 (0 OR, 2 XR)

Class 359 : OPTICS: SYSTEMS

359/109 OPTICAL COMMUNICATION

359/174 .Optical repeater system

359/176 ..Regenerative

359/177 ...Monitoring

2 360/264.2 (2 OR, 0 XR)

Class 360 : DYNAMIC MAGNETIC INFORMATION STORAGE OR  
RETRIEVAL

360/240 HEAD MOUNTING

360/260 .For shifting head between tracks

360/264 ..Disk record

360/264.1 ...Arcuate head movement

360/264.2 ....Electrical connection detail onto actuator

arm

2 361/111 (0 OR, 2 XR)

Class 361 : ELECTRICITY: ELECTRICAL SYSTEMS AND DEVICES

361/1 SAFETY AND PROTECTION OF SYSTEMS AND DEVICES

361/111 .Transient responsive

2 361/119 (2 OR, 0 XR)

Class 361 : ELECTRICITY: ELECTRICAL SYSTEMS AND DEVICES

361/1 SAFETY AND PROTECTION OF SYSTEMS AND DEVICES

361/117 .High voltage dissipation (e.g., lightning  
arrester)

361/118 ..Surge prevention (e.g., choke coil)

361/119 ...In communication systems

2 361/752 (0 OR, 2 XR)

Class 361 : ELECTRICITY: ELECTRICAL SYSTEMS AND DEVICES

361/600 HOUSING OR MOUNTING ASSEMBLIES WITH DIVERSE  
ELECTRICAL COMPONENTS

361/679 .For electronic systems and devices

361/748 ..Printed circuit board

361/752 ...With housing or chassis

2 361/783 (0 OR, 2 XR)

Class 361 : ELECTRICITY: ELECTRICAL SYSTEMS AND DEVICES

361/600 HOUSING OR MOUNTING ASSEMBLIES WITH DIVERSE  
ELECTRICAL COMPONENTS

361/679 ..For electronic systems and devices

361/748 ..Printed circuit board

361/760 ...Connection of components to board

361/783 ....Having semiconductive device

2 370/207 (0 OR, 2 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/203 GENERALIZED ORTHOGONAL OR SPECIAL MATHEMATICAL  
TECHNIQUES

370/206 ..Quadrature carriers

370/207 ..Having a signaling constellation

2 370/230 (1 OR, 1 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/229 DATA FLOW CONGESTION PREVENTION OR CONTROL

370/230 ..Control of data admission to the network

2 370/241 (2 OR, 0 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/241 DIAGNOSTIC TESTING (OTHER THAN SYNCHRONIZATION)

2 370/286 (2 OR, 0 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/276 DUPLEX

370/282 ..Transmit/receive interaction control

370/286 ..Echo suppression or cancellation

2 370/329 (1 OR, 1 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/310 COMMUNICATION OVER FREE SPACE

370/328 ..Having a plurality of contiguous regions  
served by respective fixed stations

370/329 ..Channel assignment

2 370/338 (1 OR, 1 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/310 COMMUNICATION OVER FREE SPACE

- 370/328        .Having a plurality of contiguous regions  
              served by respective fixed stations
- 370/338        ..Contiguous regions interconnected by a local  
              area network
- 2 370/341      (2 OR, 0 XR)  
    Class 370 : MULTIPLEX COMMUNICATIONS
- 370/310      COMMUNICATION OVER FREE SPACE
- 370/340      .Using trunking
- 370/341      ..Channel assignment
- 2 370/343      (0 OR, 2 XR)  
    Class 370 : MULTIPLEX COMMUNICATIONS
- 370/310      COMMUNICATION OVER FREE SPACE
- 370/343      .Combining or distributing information via  
                  frequency channels
- 2 370/356      (1 OR, 1 XR)  
    Class 370 : MULTIPLEX COMMUNICATIONS
- 370/351      PATHFINDING OR ROUTING
- 370/352      .Combined circuit switching and packet  
                  switching
- 370/356      ..Routing circuit switched traffic through a  
                  packet switching network
- 2 370/360      (1 OR, 1 XR)  
    Class 370 : MULTIPLEX COMMUNICATIONS
- 370/351      PATHFINDING OR ROUTING
- 370/357      .Through a circuit switch
- 370/360      ..Switching control
- 2 370/395.53   (1 OR, 1 XR)  
    Class 370 : MULTIPLEX COMMUNICATIONS
- 370/351      PATHFINDING OR ROUTING
- 370/389      .Switching a message which includes an address  
                  header
- 370/395.1      ..Message transmitted using fixed length  
                  packets (e.g., ATM cells)
- 370/395.5      ...Multiprotocol network
- 370/395.53      ....Emulated LAN (LANE/ELAN/VLAN, e.g.,  
                  Ethernet or token ring legacy LAN over a single ATM  
                  network/LAN)

- 2 370/420 (0 OR, 2 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/351 PATHFINDING OR ROUTING  
370/389 .Switching a message which includes an address  
header  
370/419 ..Input or output circuit, per se (i.e., line  
interface)  
370/420 ...For connecting plural subscribers to a  
network (i.e., network termination)
- 2 370/442 (0 OR, 2 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/431 CHANNEL ASSIGNMENT TECHNIQUES  
370/442 .Combining or distributing information via time  
channels using multiple access technique (e.g., TDMA)
- 2 370/467 (0 OR, 2 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/464 COMMUNICATION TECHNIQUES FOR INFORMATION  
CARRIED IN PLURAL CHANNELS  
370/465 .Adaptive  
370/466 ..Converting between protocols  
370/467 ...Conversion between signaling protocols
- 2 370/485 (1 OR, 1 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/473 ..Transmission of a single message having  
multiple packets  
370/480 .Combining or distributing information via  
frequency channels  
370/485 ..Subscriber carrier
- 2 370/487 (0 OR, 2 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/473 ..Transmission of a single message having  
multiple packets  
370/480 .Combining or distributing information via  
frequency channels  
370/485 ..Subscriber carrier  
370/486 ...Program distribution  
370/487 ....Combined communication of diverse  
information types

2 370/490 (0 OR, 2 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/473 ..Transmission of a single message having multiple packets

370/480 ..Combining or distributing information via frequency channels

370/489 ..Bus (distributed stations)

370/490 ...Combined communication of diverse information types

2 370/496 (0 OR, 2 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/473 ..Transmission of a single message having multiple packets

370/480 ..Combining or distributing information via frequency channels

370/496 ..Signaling

2 370/497 (0 OR, 2 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/473 ..Transmission of a single message having multiple packets

370/480 ..Combining or distributing information via frequency channels

370/497 ..Using particular filtering technique

2 370/527 (0 OR, 2 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/473 ..Transmission of a single message having multiple packets

370/498 ..Combining or distributing information via time channels

370/522 ..Signaling (ancillary to main information)

370/527 ...Superimposed or modulated on principal information

2 370/537 (0 OR, 2 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/473 ..Transmission of a single message having multiple packets

370/498 ..Combining or distributing information via time channels

370/537 ..Multiplexing plural input channels to a

- 2 375/228 (1 OR, 1 XR)
  - Class 375 : PULSE OR DIGITAL COMMUNICATIONS
  - 375/224 TESTING
  - 375/228 .With indicator
  
- 2 375/233 (0 OR, 2 XR)
  - Class 375 : PULSE OR DIGITAL COMMUNICATIONS
  - 375/229 EQUALIZERS
  - 375/230 .Automatic
  - 375/232 ..Adaptive
  - 375/233 ...Decision feedback equalizer
  
- 2 375/258 (0 OR, 2 XR)
  - Class 375 : PULSE OR DIGITAL COMMUNICATIONS
  - 375/257 CABLE SYSTEMS AND COMPONENTS
  - 375/258 .Transformer coupling
  
- 2 375/285 (2 OR, 0 XR)
  - Class 375 : PULSE OR DIGITAL COMMUNICATIONS
  - 375/259 SYSTEMS USING ALTERNATING OR PULSATING CURRENT
  
  - 375/285 .Antinoise or distortion
  
- 2 375/286 (1 OR, 1 XR)
  - Class 375 : PULSE OR DIGITAL COMMUNICATIONS
  - 375/286 MULTILEVEL
  
- 2 379/10.01 (0 OR, 2 XR)
  - Class 379 : TELEPHONIC COMMUNICATIONS
  - 379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
ELECTRICAL CONDITION MEASUREMENT
  - 379/9 .Of centralized switching system
  - 379/10.01 ..By automatic testing sequence
  
- 2 379/12 (0 OR, 2 XR)
  - Class 379 : TELEPHONIC COMMUNICATIONS
  - 379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
ELECTRICAL CONDITION MEASUREMENT
  - 379/9 .Of centralized switching system
  - 379/12 ..With dedicated testing line or trunk

2 379/14 (0 OR, 2 XR)  
 Class 379 : TELEPHONIC COMMUNICATIONS  
 379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
 ELECTRICAL CONDITION MEASUREMENT  
 379/9 .Of centralized switching system  
 379/14 ..Of plural exchange network

2 379/14.01 (1 OR, 1 XR)  
 Class 379 : TELEPHONIC COMMUNICATIONS  
 379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
 ELECTRICAL CONDITION MEASUREMENT  
 379/9 .Of centralized switching system  
 379/14 ..Of plural exchange network  
 379/14.01 ...Fault segmentation (e.g., error location in  
 network)

2 379/22.04 (1 OR, 1 XR)  
 Class 379 : TELEPHONIC COMMUNICATIONS  
 379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
 ELECTRICAL CONDITION MEASUREMENT  
 379/22 .Of trunk or long line  
 379/22.03 ..Fault detection or fault location on  
 telephone link (e.g., continuity, leakage)  
 379/22.04 ...Of digital loop carrier

2 379/29.04 (0 OR, 2 XR)  
 Class 379 : TELEPHONIC COMMUNICATIONS  
 379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
 ELECTRICAL CONDITION MEASUREMENT  
 379/27.01 .Testing of subscriber loop or terminal  
 379/29.01 ..Terminal arrangement to enable remote testing  
 (e.g., testing interface)  
 379/29.04 ...Voltage or current detector

2 379/29.09 (1 OR, 1 XR)  
 Class 379 : TELEPHONIC COMMUNICATIONS  
 379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR  
 ELECTRICAL CONDITION MEASUREMENT  
 379/27.01 .Testing of subscriber loop or terminal  
 379/29.01 ..Terminal arrangement to enable remote testing  
 (e.g., testing interface)  
 379/29.09 ...With historical operating information  
 database

- 2 379/31 (1 OR, 1 XR)
  - Class 379 : TELEPHONIC COMMUNICATIONS
  - 379/1.01 DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR ELECTRICAL CONDITION MEASUREMENT
  - 379/27.01 .Testing of subscriber loop or terminal
  - 379/31 ..Of line signalling generator (e.g., dial, tone code generator)
  
- 2 379/327 (0 OR, 2 XR)
  - Class 379 : TELEPHONIC COMMUNICATIONS
  - 379/242 CENTRALIZED SWITCHING SYSTEM
  - 379/325 .Structure of equipment
  - 379/326 ..Wire or cable distribution
  - 379/327 ...Main or intermediate distribution frame
  
- 2 379/399.01 (1 OR, 1 XR)
  - Class 379 : TELEPHONIC COMMUNICATIONS
  - 379/399.01 SUBSCRIBER LINE OR TRANSMISSION LINE INTERFACE
  
- 2 379/402 (1 OR, 1 XR)
  - Class 379 : TELEPHONIC COMMUNICATIONS
  - 379/399.01 SUBSCRIBER LINE OR TRANSMISSION LINE INTERFACE
  
  - 379/402 .Hybrid circuit
  
- 2 379/413 (0 OR, 2 XR)
  - Class 379 : TELEPHONIC COMMUNICATIONS
  - 379/399.01 SUBSCRIBER LINE OR TRANSMISSION LINE INTERFACE
  
  - 379/413 .Power supply (e.g., battery feed)
  
- 2 379/413.04 (1 OR, 1 XR)
  - Class 379 : TELEPHONIC COMMUNICATIONS
  - 379/399.01 SUBSCRIBER LINE OR TRANSMISSION LINE INTERFACE
  
  - 379/413.02 .Network interface device (NLD)
  - 379/413.04 ..Connection block or module
  
- 2 379/93.01 (0 OR, 2 XR)
  - Class 379 : TELEPHONIC COMMUNICATIONS
  - 379/90.01 TELEPHONE LINE OR SYSTEM COMBINED WITH DIVERSE



ELECTRICAL SYSTEM OR SIGNALLING (E.G., COMPOSITE)

379/93.01 .Having transmission of a digital message  
signal over a telephone line

2 379/93.08 (2 OR, 0 XR)

Class 379 : TELEPHONIC COMMUNICATIONS

379/90.01 TELEPHONE LINE OR SYSTEM COMBINED WITH DIVERSE  
ELECTRICAL SYSTEM OR SIGNALLING (E.G., COMPOSITE)

379/93.01 .Having transmission of a digital message  
signal over a telephone line

379/93.08 ..Transmission scheme (e.g.,  
compression/decompression, transmission rate)

2 384/276 (1 OR, 1 XR)

Class 384 : BEARINGS

384/91 ROTARY BEARING

384/129 .Plain bearing

384/276 ..Specified sleeve or liner

2 384/294 (0 OR, 2 XR)

Class 384 : BEARINGS

384/91 ROTARY BEARING

384/129 .Plain bearing

384/276 ..Specified sleeve or liner

384/294 ...For crankshaft

2 385/101 (2 OR, 0 XR)

Class 385 : OPTICAL WAVEGUIDES

385/100 OPTICAL TRANSMISSION CABLE

385/101 .With electrical conductor in the same cable

2 427/123 (0 OR, 2 XR)

Class 427 : COATING PROCESSES

427/58 ELECTRICAL PRODUCT PRODUCED

427/123 .Metal coating

2 427/124 (0 OR, 2 XR)

Class 427 : COATING PROCESSES

427/58 ELECTRICAL PRODUCT PRODUCED

427/123 .Metal coating

427/124 ..Vapor deposition or utilizing vacuum

2 427/97 (1 OR, 1 XR)

Class 427 : COATING PROCESSES  
 427/58 ELECTRICAL PRODUCT PRODUCED  
 427/96 ..Integrated circuit, printed circuit, or  
 circuit board  
 427/97 ..Coating hole walls

2 427/99 (0 OR, 2 XR)

Class 427 : COATING PROCESSES  
 427/58 ELECTRICAL PRODUCT PRODUCED  
 427/96 ..Integrated circuit, printed circuit, or  
 circuit board  
 427/99 ..Vapor deposition

2 438/628 (2 OR, 0 XR)

Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

438/584 COATING WITH ELECTRICALLY OR THERMALLY  
 CONDUCTIVE MATERIAL  
 438/597 ..To form ohmic contact to semiconductive  
 material  
 438/618 ..Contacting multiple semiconductive regions  
 (i.e., interconnects)  
 438/622 ...Multiple metal levels, separated by  
 insulating layer (i.e., multiple level metallization)  
 438/625 ....At least one metallization level formed of  
 diverse conductive layers  
 438/628 .....Having adhesion promoting layer

2 438/654 (0 OR, 2 XR)

Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

438/584 COATING WITH ELECTRICALLY OR THERMALLY  
 CONDUCTIVE MATERIAL  
 438/597 ..To form ohmic contact to semiconductive  
 material  
 438/652 ..Plural layered electrode or conductor  
 438/654 ...Having adhesion promoting layer

2 438/658 (0 OR, 2 XR)

Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

438/584 COATING WITH ELECTRICALLY OR THERMALLY  
 CONDUCTIVE MATERIAL

438/597 .To form ohmic contact to semiconductive material

438/658 ..Altering composition of conductor

2 438/660 (0 OR, 2 XR)

Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

438/584 COATING WITH ELECTRICALLY OR THERMALLY CONDUCTIVE MATERIAL

438/597 .To form ohmic contact to semiconductive material

438/660 ..Including heat treatment of conductive layer

2 439/404 (1 OR, 1 XR)

Class 439 : ELECTRICAL CONNECTORS

439/387 CONTACT COMPRISING CUTTER (SEVERING, PIERCING, ABRADING, SCRAPING, BREAKING OR TEARING)

439/389 .Insulation cutter

439/391 ..Conductor sheath piercing

439/395 ...Having slot edge for cutting insulation

439/404 ....Plural contacts, each formed by slot between pair of fingers

2 439/49 (1 OR, 1 XR)

Class 439 : ELECTRICAL CONNECTORS

439/43 WITH SELECTABLE CIRCUIT, E.G., PLUG BOARD

439/49 .Including three or more contacts adapted to be selectively interconnected

2 439/62 (1 OR, 1 XR)

Class 439 : ELECTRICAL CONNECTORS

439/55 PREFORMED PANEL CIRCUIT ARRANGEMENT, E.G., PCB, ICM, DIP, CHIP, WAFER, ETC.

439/59 .With mating connector which receives panel circuit edge

439/62 ..Panel mounted connector which receives edge of panel circuit

2 439/94 (1 OR, 1 XR)

Class 439 : ELECTRICAL CONNECTORS

439/92 WITH CIRCUIT CONDUCTORS AND SAFETY GROUNDING PROVISION

439/94 .Uninterrupted support rail or contact, or for  
interfitting with uninterrupted support rail or contact

2 455/1 (0 OR, 2 XR)

Class 455 : TELECOMMUNICATIONS  
455/1 INTERFERENCE SIGNAL TRANSMISSION (E.G.,  
JAMMING)

2 455/26.1 (0 OR, 2 XR)

Class 455 : TELECOMMUNICATIONS  
455/26.1 USE OR ACCESS BLOCKING (E.G., LOCKING SWITCH)

2 702/69 (0 OR, 2 XR)

Class 702 : DATA PROCESSING: MEASURING, CALIBRATING, OR  
TESTING  
702/1 MEASUREMENT SYSTEM IN A SPECIFIC ENVIRONMENT  
702/57 .Electrical signal parameter measurement system

702/66 ..Waveform analysis  
702/69 ...Signal quality (e.g., timing jitter,  
distortion, signal-to-noise ratio)

2 725/118 (0 OR, 2 XR)

Class 725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS  
725/105 VIDEO DISTRIBUTION SYSTEM WITH UPSTREAM  
COMMUNICATION  
725/118 .Transmission network

2 725/130 (0 OR, 2 XR)

Class 725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS  
725/105 VIDEO DISTRIBUTION SYSTEM WITH UPSTREAM  
COMMUNICATION  
725/118 .Transmission network  
725/130 ..Power signal over network